

# Sanctioning Cartel Activity: Let the Punishment Fit the Crime

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This essay explains how economic analysis and enforcement experience support the conclusion that cartel activity should be viewed as a serious crime and punished with serious sanctions on both business enterprises and individuals. My subtitle provides part of the argument: “Let the punishment fit the crime.” As many before me, I borrow William Schwenck Gilbert’s memorable line from *The Mikado*, a contemporary of the earliest criminal statutes relating to cartel activity.<sup>1</sup> For historic background and current context, I initially review the evolution of sanctions for cartel activity in the United States.

## SANCTIONS FOR CARTEL ACTIVITY IN THE UNITED STATES

With the enactment of the Sherman Act in 1890, cartel activity in the United States became a misdemeanor punishable by up to a year in prison,<sup>2</sup> but during the first seventy years of enforcement, prison sentences were very rarely imposed

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<sup>1</sup>*The Mikado* opened in London on 14 March 1885 and in Chicago 6 July 1885. The longest surviving criminal anti-cartel law is that of the United States, the Sherman Act, 15 U.S.C. § 1, which became law on 2 July 1890. The Sherman Act, however, was not the first criminal anti-cartel law. Thirteen of the states already had enacted similar laws. See H. Seager & C. Gulick, Jr., *Trust and Corporation Problems* 342 & n.1 (1929). The first national criminal anti-cartel law was that of Canada, enacted on 2 May 1889. See J. Ball, *Canadian Anti-Trust Legislation* 7–12 (1934); S. Scott, *Criminal Enforcement of Antitrust Laws: The U.S. Model—A Canadian Perspective*, in B. Hawk, ed., 2006 *Fordham Competition Law Institute* 57, 58–60 (2007). In six states criminal anti-cartel laws went into effect in the months just before the Canadian law was enacted: Maine (7 March), Kansas (9 March), North Carolina (11 March), Nebraska (29 March), Texas (30 March), and Tennessee (6 April).

<sup>2</sup>The Sherman Act prohibits not just cartel activity. Section 1 of the Act prohibits all unreasonable restraints on competition effected through concerted conduct. See *State Oil Co. v. Khan*, 522 U.S. 3, 10 (1997). Section 2 of the Act prohibits certain single-competitor exclusionary conduct. See *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004); *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993).

in cases involving ordinary cartel activity.<sup>3</sup> Rare exceptions occurred in 1921 and 1959.<sup>4</sup> A 1967 law review article reflected the general consensus in stating that cartel activities were “not crimes of moral turpitude” and thus were “classified as *malum prohibitum* crimes rather than *mala in se* crimes.”<sup>5</sup>

In the early 1970s, individuals were incarcerated after eight percent of successful cartel prosecutions, and imprisoned individuals served an average of 44 days.<sup>6</sup> Congress amended the Sherman Act in 1974 to increase penalties and make cartel activity a felony.<sup>7</sup> The maximum prison sentence was increased from one to three years. The change applied only to offenses committed after 1 January 1975, and during 1975–80 slightly more than half of Sherman Act defendants were sentenced under the original misdemeanor statute. During this period, prison sentences were imposed nearly three times as often under the felony statute as under the misdemeanor statute. In addition, the average term for individuals sentenced to prison under the felony statute was more than three times that for individuals sentenced under the misdemeanor statute.<sup>8</sup> Sentencing judges

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<sup>3</sup>Prison sentences were more commonly imposed when violence or labor union activity was involved. See P. Hadlick, *Criminal Prosecutions under the Sherman Anti-Trust Act* 63–117 (1939) (discussing labor and business racketeering cases). During World War I, eight individuals were sentenced to one-year prison terms under the Sherman Act for conspiracies to interfere with munitions shipments. See *The Federal Antitrust Laws with Summaries of Cases Instituted by the United States 1890–1951*, at 109–10 (Commerce Clearing House, 1952).

<sup>4</sup>In 1921 individuals first reported to prison for having engaged in cartel activity. The case was *United States v. Alexander & Reid Co.*, 280 Fed. 924, 927 (S.D.N.Y. 1922) (describing bid rigging by the building contractors). The sentencing of four individuals to a total 10 months was reported by *New York Times*, 24 November 1921, at 4. Some sources incorrectly report that prison sentences for cartel activity were not until 1959. The latter case was *United States v. McDonough Co.*, 1960 Trade Cases (CCH) ¶ 69,695 (S.D. Ohio, 9 December 1959) (order upholding sentences). Four individuals were each sentenced to 90 days for fixing the prices of hand tools such as shovels and rakes, but one died before reporting to prison.

<sup>5</sup>J. Flynn, *Criminal Sanctions under State and Federal Antitrust Laws*, 45 *Texas Law Review* 1301, 1315 (1967).

<sup>6</sup>See J. Gallo, J. Craycraft & S. Bush, *Guess Who Came to Dinner: An Empirical Study of Federal Antitrust Enforcement for the Period 1963–1984*, 2 *Review of Industrial Organization* 106, 122–23 (1985). Full details of all Sherman Act sentences during 1955–80 can be found in 1 J. Clabault & M. Block, *Sherman Act Indictments: 1955–1980* (1981).

<sup>7</sup>*Antitrust Penalties and Procedures Act*, Public Law 93-528, § 3, 88 Stat. 1708.

<sup>8</sup>See M. Cohen, *The Role of Criminal Sanctions in Antitrust Enforcement*, *Contemporary Policy Issues*, October 1989, at 36, 41. This increase in the average term of prison sentences did not result simply from relieving the constraint of the one-year statutory maximum, as that sentence had been

responded to the new direction Congress gave them by making cartel activity a felony.

In late 1976 and early 1977, the Assistant Attorney General in charge of the Antitrust Division of the U.S. Department of Justice pushed for an increase in the sentences imposed on those convicted of engaging in cartel activity. He gave a major speech arguing that cartel activity was a serious crime requiring serious sanctions. He outlined forthcoming sentencing guidelines, consisting of base sentences along with aggravating and mitigating factors.<sup>9</sup> A few months later, the guidelines were promulgated within the Antitrust Division and made public.<sup>10</sup> The guidelines proposed a base prison sentence for individuals of eighteen months. That term was the midpoint of the range provided by statute and was selected with the understanding that the parole system then in effect would reduce the time actually served by more than half.<sup>11</sup>

The Assistant Attorney General's efforts were not met with immediate success. About a week after the guidelines were promulgated, one of the most important sentencing decisions of the era was rendered.<sup>12</sup> In the interest of deterrence, the Antitrust Division had argued that 48 individuals found guilty of bid rigging should be imprisoned, but the court was not convinced. The court took the view that imprisonment was justified for "a crime that is *malum in se* in that it offends some deep-seated and historical morality" and that antitrust violations were not "by definition" such crimes, although they might be

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imposed on less than one percent of individuals. See J. Gallo, et al., Criminal Penalties under the Sherman Act: A Study in Law and Economics, in R. Zerbe, Jr., ed., 16 Research in Law and Economics 25, 56 (1994).

<sup>9</sup>D. Baker, To Make the Penalty Fit the Crime: How to Sentence Antitrust Felons, remarks before the Tenth New England Antitrust Conference (20 November 1976), reprinted in 2 J. Clabault & M. Block, Sherman Act Indictments: 1955–1980, at 529 (1981). AAG Donald I. Baker argued that: "Antitrust price fixing is a serious crime. . . . It is a felony which should be discouraged by the certain imposition of *substantial* criminal sanctions." Id. at 537.

<sup>10</sup>Guidelines for Sentencing: Recommendations in Felony Cases under the Sherman Act (24 February 1977), reprinted in Clabault & Block, *supra* note 9, at 549 (1981).

<sup>11</sup>Id. at 554–56. The parole system then in effect was abolished in the 1980s as part of the reforms associated with the Sentencing Guidelines, discussed *infra* at notes 16–18.

<sup>12</sup>*United States v. Alton Box Board Co.*, 1977-1 Trade Cases (CCH) ¶ 61,336 (N.D. Ill. 1977). The case was governed by the original misdemeanor statute.

“performed in such a manner as would cause them to be *malum in se*.”<sup>13</sup> The court sentenced the 48 individuals to a total of 75 days in jail.<sup>14</sup>

In the early 1980s, individuals were incarcerated after 29 percent of successful cartel prosecutions, and the imprisoned individuals served an average of 120 days.<sup>15</sup> In 1984 Congress created the United States Sentencing Commission to revamp federal criminal sentencing. The Commission’s initial guidelines took effect on 1 November 1987.<sup>16</sup> Sentences in the guidelines were designed to achieve deterrence,<sup>17</sup> and the antitrust guideline provided significantly greater sanctions for cartel activity than had been the norm.<sup>18</sup> The impact was substantial. In the early 1990s, the average term of incarceration was 247 days, and in the late 1990s, fines of over \$100 million began to be imposed on large business enterprises.<sup>19</sup>

Maximum penalties were most recently increased by a 2004 amendment to the Sherman Act. Individuals convicted of violating the Act now may be imprisoned for up to ten years.<sup>20</sup> Sanctions actually imposed have continued to

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<sup>13</sup>Id. at 71,166–67.

<sup>14</sup>Id. at 71,184–85.

<sup>15</sup>See Gallo et al., *supra* note 6, at 124–25.

<sup>16</sup>United States Sentencing Commission, Sentencing Guidelines and Policy Statements (13 April 1987), reprinted at 52 Federal Register 18,046 (1987).

<sup>17</sup> See J. Parker, Criminal Sentencing Policy for Organizations: The Unifying Approach of Optimal Penalties, 26 American Criminal Law Review 513 (1989).

<sup>18</sup>On the development and evolution of the sentencing guideline for antitrust, see A.M. Herron, The Antitrust Sentencing Guidelines: Deterring Crime by Clarifying the Volume of Commerce Muddle, 51 Emory Law Journal 929, 931–43 (2002).

<sup>19</sup>At the time, the Sherman Act provided for a maximum corporate fine of \$10 million. Higher fines were possible under a 1984 law applicable to all federal crimes providing that “[i]f any person derives pecuniary gain from the offense, or if the offense results in pecuniary loss to a person other than the defendant, the defendant may be fined not more than the greater of twice the gross gain or twice the gross loss, unless imposition of a fine under this subsection would unduly complicate or prolong the sentencing process.” 18 U.S.C. § 3571(d). A current list of the largest Sherman Act fines on business enterprises is available on the Antitrust Division’s website at <http://www.usdoj.gov/atr/public/criminal/225540.htm>.

<sup>20</sup>15 U.S.C. § 1, as amended by Public Law 108-237, Title II, § 215(a), 118 Stat. 668. The maximum fine on an individual was increased to \$1 million, and the maximum fine on a corporation was increased to \$100 million. Fines can exceed this statutory maximum, however, under the provisions of 18 U.S.C. § 3571(d), set out in note 19.

increase. During 2005–07, the average term of incarceration for all crimes prosecuted by the Antitrust Division was 703 days.<sup>21</sup> During this period, 76 percent of convicted individuals were sentenced to terms of incarceration.<sup>22</sup>

### WHAT CONSTITUTES “CARTEL ACTIVITY”

Cartel activity is a type of cooperation among competitors identified both by what the competitors do and what they don’t do.<sup>23</sup> With cartel activity, the competitors enter into an agreement as to the material terms on which they compete, e.g., the prices they charge, or as to whether they compete at all in particular places or for particular customers.<sup>24</sup> And with cartel activity, the agreement on the terms of competition or on whether to compete is not part of a larger cooperative venture in which the competitors integrate their activities in a manner reasonably expected to generate efficiencies or otherwise benefit consumers.<sup>25</sup>

Rigging bids and allocating customers are typical examples of cartel activity. An agreement between competitors to merge could be construed as an agreement as to whether they compete and might be anticompetitive, but unlike cartel activity, the merger produces a potentially efficiency enhancing integration. The agreement among competitors to pool complementary resources in ways that create new products or serve additional customers normally is procompetitive and has little resemblance to cartel activity.

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<sup>21</sup>The Antitrust Division prosecutes non-antitrust criminal offenses such as bribery, wire fraud, and obstruction of justice that are uncovered in investigations of cartel activity.

<sup>22</sup>Judge Posner has questioned the deterrent effect of the prison sentence for cartel activity on the basis that it had been “imposed so rarely.” R. Posner, *Antitrust Law* 270–71 (2d ed. 2001). The latest statistics, however, greatly undermine the basis of his argument.

<sup>23</sup>What I refer to as “cartel activity” is often termed “hard-core cartel conduct.” See International Competition Network, *Building Blocks for Effective Anti-Cartel Regimes, Defining Hard Core Cartel Conduct—Effective Institutions—Effective Penalties* 9–12 (2005); Organization for Economic Co-Operation and Development (OECD), *Recommendation of the Council Concerning Effective Action Against Hard Core Cartels* (adopted 25 March 1998), reprinted in OECD, *Hard Core Cartels* 57–60 (2000).

<sup>24</sup>On the definition and proof of such an agreement, G. Werden, *Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory*, 71 *Antitrust Law Journal* 719 (2004).

<sup>25</sup>See G. Werden, *Antitrust Analysis of Joint Ventures: An Overview*, 66 *Antitrust Law Journal* 701, 712–15 (1998).

A key distinction between cartel activity and other types of competitor cooperation that also could offend competition law is that cartel activity entails cooperation on business decisions, such as the choice of prices, outputs, or which customers to serve, and not also cooperation on business functions such as research or distribution.<sup>26</sup> Competitors engaged in legitimate cooperation might use it as a cover for cartel activity, but the existence of the legitimate cooperation is irrelevant if the suspect cooperation is not reasonably necessary to the accomplishment of the procompetitive objectives of legitimate cooperation.<sup>27</sup>

### **CARTEL ACTIVITY SHOULD BE VIEWED AND TREATED AS A CRIME**

Cartel activity is properly viewed as a property crime, like burglary or larceny, although cartel activity inflicts far greater economic harm. Cartel activity robs consumers and other market participants of the tangible blessings of competition. Cartel activity is never efficient or otherwise socially desirable; cartel participants can never gain more than the public loses. Cartel activity, therefore, is not like tortious conduct, which is redressed with a liability rule focusing on the harm to victims and providing the incentive to take due care.<sup>28</sup> Like other property crimes, cartel activity should be prohibited rather than merely taxed.<sup>29</sup> As Judge Richard Posner explained of criminal sanctions generally, they “are not really prices designed to ration the activity; the purpose so far as possible is to extirpate it.”<sup>30</sup>

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<sup>26</sup>See *id.* at 714.

<sup>27</sup>See G. Werden, *The Ancillary Restraints Doctrine after Dagher*, 8 *Sedona Conference Journal* 17 (2007).

<sup>28</sup>See G. Calabresi & A.D. Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 *Harvard Law Review* 1089, 1124–27 (1972).

<sup>29</sup>On the differing treatments of crimes and torts, and the distinction between optimal sanctions and optimal taxes, see J. Coffee, Jr., *Paradigms Lost: The Blurring of the Criminal and Civil Law Models—And What Can Be Done About It*, 101 *Yale Law Journal* 1875, 1876–77, 1882–87 (1992); R. Cooter, *Prices and Sanctions*, 84 *Columbia Law Review* 1523 (1984); S. Shavell, *The Optimal Use of Nonmonetary Sanctions as a Deterrent*, 77 *American Economic Review* 584, 590 (1987).

<sup>30</sup>See R. Posner, *An Economic Theory of Criminal Law*, 85 *Columbia Law Review* 1193, 1215 (1985). This approach is advocated in the context of competition law by W. Wils, *Optimal Antitrust Fines: Theory and Practice*, 29 *World Competition* 183, 191–92 (2006). However, Wils relies on doubtful rationale for the approach—that the goal of competition policy is “to prevent wealth transfers from consumers to producers,” and he goes too far by advocating this approach for more than cartel activity.

Cartel activity materially differs from other property crimes only with respect to the purpose of sanctions. Rehabilitation and incapacitation are important purposes for most criminal sanctions, but deterrence is the only significant function of sanctions for cartel activity, and the specific deterrence of convicted offenders clearly is secondary to the general deterrence of potential offenders.<sup>31</sup>

The analytic basis for treating cartel activity as a serious crime is clear, but more than analysis is required before a society treats cartel activity as a serious crime.<sup>32</sup> When he was the member of the European Commission with responsibility for competition, Mario Monti spoke of developing a “competition culture.”<sup>33</sup> This can be a slow process, as it was in the United States.<sup>34</sup> Only after long experience with the Sherman Act did the Supreme Court of the United States declare that the Act established “a regime of competition as the fundamental principle governing commerce in this country.”<sup>35</sup> Cartel activity is a frontal assault on this principle and thus can now be seen as a major breach of social norms.<sup>36</sup>

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<sup>31</sup>See, e.g., D. Baker & B. Reeves, *The Paper Label Sentences: Critiques*, 86 *Yale Law Journal* 619, 619–21 (1977); C. Renfrew, *The Paper Label Sentence: An Evaluation*, 86 *Yale Law Journal* 590, 592–93 (1977). See generally B. Fisse, *Reconstructing Corporate Criminal Law: Deterrence, Retribution, Fault, and Sanctions*, 56 *Southern California Law Review* 1141 (1983) (arguing in general that deterrence and retribution are the goals of criminal sanctions on business enterprises).

<sup>32</sup>See A. Klevorick, *Legal Theory and Economic Analysis of Torts and Crimes*, 85 *Columbia Law Review* 905, 909 (1985) (arguing that “a coherent explanation of the criminal category necessitates answers to noneconomic questions about political legitimacy and authority, about the rights of individuals and the power of the state, about the political, moral, and legal constraints on the exercise of rights and powers”).

<sup>33</sup>See M. Monti, *The New Shape of European Competition Policy* (20 Nov. 2003), available at <http://www.jftc.go.jp/cprc/sympo/2003sympo/agenda25.pdf>; Opening Speech at First OECD Global Forum on Competition (17 Oct. 2001), available at <http://www.oecd.org/dataoecd/0/49/2434501.pdf>.

<sup>34</sup>See D. Baker, *The Use of Criminal Law Remedies to Deter and Punish Cartels and Bid-Rigging*, 69 *George Washington Law Review* 693, 694 (2001) (“the United States did not arrive at the point it has—with potential criminal liability and jail time as serious deterrents—quickly or easily”).

<sup>35</sup>*City of Lafayette, Louisiana v. Louisiana Power & Light Co.*, 435 U.S. 389, 398 (1978). See also *Northern Pacific Railway Co. v. United States*, 356 U.S. 1, 4 (1958) (“The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade.”).

<sup>36</sup>A European commentator recently observed that cartel activity “aims to undermine and destroy

In the United States, nearly a century was required for the competition culture to evolve to the point that it was natural to view cartel activity as a serious crime meriting incarceration for individual offenders. In Canada a competition culture has not evolved nearly to the same point, although Canada has had a criminal anti-cartel law longer than the United States.<sup>37</sup> The competition cultures of some countries have evolved much faster than in the United States and even further than in Canada. Ireland criminalized cartel activity in 1996,<sup>38</sup> and current law authorizes prison sentences of up to five years.<sup>39</sup> The sentencing judge in a recent case delivered a judgment favoring custodial sentences, although he suspended the 12 month sentence he imposed.<sup>40</sup> Israel criminalized cartel activity in 1988 and authorized prison sentence of up to three years.<sup>41</sup> The first executives were imprisoned in 2002.<sup>42</sup> The United Kingdom criminalized cartel activity in 2002 and authorized prison sentences for individuals of up to five years.<sup>43</sup> The first criminal convictions of individuals resulted in serious sanctions. On 11 June

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a fundamental economic and political philosophy of Western democracies, i.e. free market capitalism, and thus arguably violates prevailing mores.” See P. Whelan, A Principled Argument for Personal Criminal Sanctions as Punishment under EC Cartel Law, 4 Competition Law Review 7, 29 (2007). The sociologist who coined the term “white collar crime” argued more than a half century ago that: “The Sherman Antitrust Law . . . represents a settled tradition in favor of competition and free enterprise. . . . A violation of the antitrust laws is a violation of strongly entrenched moral sentiments.” E. Sutherland, White Collar Crime 45 (1949).

<sup>37</sup>See Scott, *supra* note 1, at 69–73, 76–77. Canadian law currently authorizes prison sentences for individuals of up to five years. Competition Act of 1985, §§ 45, 47, available at <http://laws.justice.gc.ca/en/ShowFullDoc/cs/C-34///en>.

<sup>38</sup>Competition (Amendment) Act, No. 19/1996, § 3, available at <http://www.irishstatutebook.ie/1996/en/act/pub/0019/index.html>.

<sup>39</sup>Competition Act, No. 14/2002, §§ 4, 6 & 8, available at <http://www.irishstatutebook.ie/2002/en/act/pub/0014/index.html>.

<sup>40</sup>See Competition Authority (Ireland), Annual Report 2007, at 7–9 (2008), available at [http://www.tca.ie/controls/getimage.ashx?image\\_id=2041](http://www.tca.ie/controls/getimage.ashx?image_id=2041); see also M. Curtis & J. McNally, The Classic Cartel—Hatchback Sentence?, 4 Competition Law Review 41 (2007). The case was *DPP v. Manning*, and involved an agreement among Ford dealers to fix the selling prices of their cars.

<sup>41</sup>Restrictive Trade Practices Act 5748 - 1988, §§ 2, 4 & 47, available at <http://www.antitrust.gov.il/Antitrust/en-S/LawandRegulations/RestrictiveTradePracticesLaw.htm>.

<sup>42</sup>See OECD, Hard Core Cartels: Third Report on the Implementation of the 1998 Council Recommendation 10 (2005), available at <http://www.oecd.org/dataoecd/58/1/35863307.pdf>.

<sup>43</sup>Enterprise Act, §§ 188–90, available at [http://www.opsi.gov.uk/acts/acts2002/ukpga\\_20020040\\_en\\_1](http://www.opsi.gov.uk/acts/acts2002/ukpga_20020040_en_1). See generally Office of Fair Trading, The Cartel Offense (OFT 513, April 2003), available at [http://www.oft.gov.uk/shared\\_of/buiness\\_leaflets/enterprise\\_act/oft513.pdf](http://www.oft.gov.uk/shared_of/buiness_leaflets/enterprise_act/oft513.pdf).



2008 the Southwark Crown Court sentenced two executives to 36 month terms of imprisonment and a third to a term of 30 months.<sup>44</sup>

### **CARTEL ACTIVITY IS UNIQUE IN COMPETITION LAW**

Cartel activity differs in important ways from other conduct addressed by competition law. First, cartel activity is almost invariably covert, and participants often engage in affirmative acts of concealment. Because cartel participants conduct themselves in the same furtive manner as other criminal conspirators, U.S. judges and juries tend to be comfortable with treating cartel participants as criminals.<sup>45</sup>

Second, cartel activity is categorically condemned, whereas nearly all other conduct addressed by competition law is appropriately evaluated case-by-case and found unlawful only if that evaluation concludes that the conduct's effects make it unlawful under the governing legal test (e.g., the effect of the conduct on competition or consumer welfare). The relevant effects of conduct are often subtle, so this evaluation can be difficult, and errors are unavoidable. Such conduct should be treated essentially as a tort in order to avoid deterring the procompetitive conduct that could be erroneously found unlawful in a faulty evaluation of effects. In addition, competition law violations other than cartel activity typically do not exhibit the *mens rea* (or guilty state of mind) normally required for a criminal conviction.<sup>46</sup>

Third, the label of "cartel activity" cannot be applied by mistake to conduct that could be procompetitive. Thus, imposing serious sanctions on cartel activity does not chill any legitimate, procompetitive conduct that could be mistaken for cartel activity; there is no risk of over deterrence. In contrast, other types of conduct often pose a problem of characterization, and errors are inevitable.<sup>47</sup> This

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<sup>44</sup>The three individuals had pleaded guilty in a U.S. court, agreeing to be sentenced to prison terms of 30, 24, and 20 months, but the U.S. court deferred the imposition of sentence pending prosecution in the UK. On appeal in the UK, the sentences were reduced to those imposed in the U.S.

<sup>45</sup>See T. Barnett, Criminal Enforcement of the Antitrust Laws: The U.S. Model, in B. Hawk, ed., 2006 Fordham Competition Law Institute 1, 3 (2007).

<sup>46</sup>Under the Sherman Act, "the perpetrator's knowledge of the anticipated consequences [of cartel activity] is a sufficient predicate for a finding of [the requisite] criminal intent." See *United States v. United States Gypsum Co.*, 438 U.S. 422, 446 (1977).

<sup>47</sup>See M. Block & J.G. Sidak, The Cost of Antitrust Deterrence: Why Not Hang a Price Fixer Now

is a particularly serious problem for single-competitor exclusionary conduct because lawful aggressive competition on the merits looks much like anticompetitive exclusionary conduct.<sup>48</sup> Only cartel activity merits serious sanctions designed strictly to deter.<sup>49</sup>

### CARTEL ACTIVITY DOES SUBSTANTIAL HARM

A good indication of the direct and immediate social harm caused by cartel activity is its effect on prices.<sup>50</sup> An attempt was made recently to compile every published estimate of the price effect of cartel activity any where in the world, any time in history. In total, 770 estimates of the average price effect of particular cartels were identified from court decisions, economic literature, and historical accounts. Their median was 25 percent.<sup>51</sup>

No quality screening was done in compiling these estimates, and many surely were not produced using reliable measurement techniques. In addition, very little of the cartel activity was subject to serious sanctions. The most interesting estimates are the relatively few made by applying the tools of modern economics to data relating to cartel activity prosecuted in the United States under

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and Then, 68 Georgetown Law Review 1131, 1136–38 (1980) (ostensibly discussing sanctions for cartel activity but pointing to the potential for error only with respect to conduct other than cartel activity).

<sup>48</sup>See F. Easterbrook, When Is it Worthwhile to Use Courts to Search for Exclusionary Conduct?, 2003 Columbia Business Law Review 345, 345 (“Aggressive, competitive conduct by any firm, even one with market power, is beneficial to consumers. Courts should prize and encourage it. Aggressive, exclusionary conduct is deleterious to consumers, and courts should condemn it. The big problem lies in this: competitive and exclusionary conduct look alike.”).

<sup>49</sup>See W. Wils, Is Criminalization of EU Competition Law the Answer?, in K. Cseres, M.P. Schinkel & F. Vogelaar, eds., Criminalization of Competition Law Enforcement 60, 85 (2006) (“imprisonment is desirable” for cartel activity; for other violations of competition law, the risk of over deterrence “is much more substantial”). A significant possibility of over deterrence significantly alters the socially optimal sanctions under criminal law. See M. Block, Optimal Penalties, Criminal Law and the Control of Corporate Behavior, 71 Boston University Law Review 395 (1991); W. Schwartz, An Overview of the Economics of Antitrust Enforcement, 68 Georgetown Law Review 1075, 1079–83 (1980).

<sup>50</sup>Price effects are good *indicators* of harm, but not necessarily good *measures* of harm. The principle shortcoming of price effects as measures of harm is that they ignore effects on quantities associated with effects on prices. If cartel activity increases prices by twenty percent, it likely reduces output by at least ten percent. The harm inflicted on customers includes the value they had derived from the purchases they longer make.

<sup>51</sup>See J. Connor, Price-Fixing Overcharges: Legal and Economic Evidence, in J. Kirkwood, ed., 22 Research in Law and Economics 59 (2007).

the felony statute enacted in 1974. Considering just these estimates vastly reduces the amount of evidence but does not greatly change the picture. Cartel activity risking serious sanctions has been consistently found to have inflicted substantial harm.

In the 1980s and early 1990s, much of the cartel activity prosecuted in the United States involved bid rigging, especially in public procurement. Bid rigging on frozen fish raised prices paid an estimated 23–30 percent.<sup>52</sup> Bid rigging in highway construction raised prices paid an estimated 18 percent in one state and 6.5 percent in another.<sup>53</sup> Bid rigging in the procurement of milk by schools raised prices paid an estimated 6.5 percent in one state<sup>54</sup> and at least 14 percent in two others.<sup>55</sup> Bid rigging also has occurred in selling auctions, with cartel activity involving buyers. Bid rigging on used police cars reduced prices paid an estimated 17–28 percent.<sup>56</sup> Bid rigging in real estate auctions reduced prices paid an estimated 32 percent on average.<sup>57</sup> Evidence on the effects of recent international price fixing conspiracies is sparser, but price fixing increased lysine prices an estimated 17 percent, citric acid prices an estimated 11–24 percent, and prices of various vitamins an estimated 25–28 percent on average.<sup>58</sup>

### **DETECTING CARTEL ACTIVITY REQUIRES SERIOUS SANCTIONS**

To deter cartel activity, the sanctions imposed on cartel participants must

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<sup>52</sup>See L. Froeb, R. Koyak & G. Werden, What is the Effect of Bid-Rigging on Prices?, 42 *Economics Letters* 419 (1993).

<sup>53</sup>See L. Brannman & J.D. Klein, The Effectiveness and Stability of Highway Bid-Rigging, in D. Audretsch & J. Siegfried, eds., *Empirical Studies in Industrial Organization: Essays in Honor of Leonard W. Weiss* 61 (1992).

<sup>54</sup>See R. Porter & J.D. Zona, Ohio School Milk Markets: An Analysis of Bidding, 30 *RAND Journal of Economics* 263 (1999).

<sup>55</sup>See R. Lanzillotti, The Great School Milk Conspiracies of the 1980s, 11 *Review of Industrial Organization* 413 (1996); I. Lee, Non-Cooperative Tacit Collusion, Complementary Bidding and Incumbency Premium, 15 *Review of Industrial Organization* 115 (1999); M. Pesendorfer, A Study of Collusion in First-Price Auctions, 67 *Review of Economic Studies* 381 (2000).

<sup>56</sup>See J. Nelson, Comparative Antitrust Damages in Bid-Rigging Cases: Some Findings from a Used Vehicle Auction, 38 *Antitrust Bulletin* 369 (1993).

<sup>57</sup>See J. Kwoka, The Price Effect of Bidding Conspiracies: Evidence from Real Estate “Knockouts,” 42 *Antitrust Bulletin* 503 (1997).

<sup>58</sup>See J. Connor, Global Price Fixing: Our Customers are the Enemies 157–58, 264, 336 (2001).

produce sufficient disutility to outweigh what the participants expect to gain from the cartel activity. Moreover, the disutility of the sanctions must outweigh the expected gain by enough to account for the fact that the sanctions may not be imposed at all and would be imposed, if at all, after the gains had been realized. Consequently, extraordinary large fines could be required to deter cartel activity.

In view of the empirical evidence just reviewed, a conservative assumption is that cartel activity increases prices by ten percent. The average duration of cartel activity was six years in forty relatively recent cases brought by the Antitrust Division or the European Commission.<sup>59</sup> So suppose that participants expect their cartel activity to increase prices by ten percent for six years. Suppose also that participants expect their cartel activity to be detected and sanctioned only one time out of four and that any sanctions would be imposed two years after the cartel activity ceased. Accounting for the effect on profits from selling less at the higher price,<sup>60</sup> the probability that the sanctions would not be imposed at all, and the time value of money,<sup>61</sup> the expected fine necessary to deter the cartel activity would be a bit more than twice the participants' annual turnover within the relevant market.<sup>62</sup>

The foregoing illustration is built on many assumptions, only one of which lacks empirical support. There is little evidence on the probability with which cartel activity is detected. However, the fact that major international cartels continue to be uncovered despite the significant fines imposed by multiple

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<sup>59</sup>See S. Evenett, M. Levenstein & V. Suslow, *International Cartel Enforcement: Lessons from the 1990s*, 24 *The World Economy* 1221, 1226 (2001). See also G. Werden & M. Simon, *Why Price Fixers Should Go to Prison*, 32 *Antitrust Bulletin* 917, 925 (1987) (average duration of cartel activity alleged in indictments handed down in the U.S. during 1975–80 was just over six years).

<sup>60</sup>For this purpose, I use the formula provided by M. Motta, *On Cartel Deterrence and Fines in the European Union*, 2008 *European Competition Law Review* 209, 219. I assume the price but for the cartel price reflects a 100 percent mark up over marginal cost and the elasticity of demand is 0.7. Under these assumptions, the increase in profit from the cartel activity is 57 percent of the “overcharge,” which is ten percent of turnover, given the assumed price increase. These assumptions, and the others I make, are more conservative than those made by Motta.

<sup>61</sup>I assume an interest rate of six percent compounded continuously. An income stream of  $x$  for six years, plus two additional years of interest, in the end, is worth  $9.2x$ .

<sup>62</sup>Leniency programs, discussed below, can significantly reduce the fine necessary to deter. See P. Buccirosi & G. Spagnolo, *Optimal Fines in the Era of Whistleblowers: Should Price Fixers Still Go to Prison*, in V. Ghosal & J. Stennek, *The Political Economy of Antitrust* 81 (2007).

jurisdictions, and prison sentences imposed in the United States, indicates that cartel participants reckoned the probability of detection to be rather low, quite plausibly less than the assumed 25 percent.

Monetary sanctions imposed on cartel participants are vastly higher than a generation ago but appear to fall well short of twice the participants' annual turnover within the relevant market. That is an implication of a study of monetary sanctions in 56 recent international cartel cases. The total median monetary sanction, including fines imposed by Canada, the European Commission, and United States as well as the civil damages in the United States, amounted to roughly 32 percent of the annual turnover affected by the cartel activity.<sup>63</sup>

### ENTERPRISE LIQUIDITY AND INDIVIDUAL SANCTIONS

Economic analyses of criminal law generally conclude that monetary sanctions are more efficient than non-monetary sanctions, particularly imprisonment.<sup>64</sup> The analyses begin by observing that prisons are expensive and that imprisoning people deprives society of their productivity. The analyses then assert that any desired level of deterrence could be achieved without incurring either cost because a fine would be costless and a sufficiently large fine generally could achieve the same level of deterrence as any prison sentence.<sup>65</sup> The analyses conclude that imprisonment is efficient only to the extent that liability limits for

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<sup>63</sup>The study found that the average duration of cartel activity was 6.6 years and that median monetary sanctions was 4.9 percent the total turnover affected by the cartel activity over its lifetime. See Y. Bolotova & J. Connor, *Cartel Sanctions: An Empirical Analysis* (unpublished paper, 3 April 2008), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1116421](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1116421). The study also estimated the median price increase from the cartel activity to have been 27.0 percent, which suggests that the fine necessary for deterrence is far more than twice annual turnover.

<sup>64</sup>See, e.g., R. Posner, *Economic Analysis of Law* 223–24 (7th ed. 2007); G. Becker, *Crime and Punishment: An Economic Approach*, 76 *Journal of Political Economy* 169 (1969); K. Elzinga & W. Breit, *Antitrust Penalties and Attitudes Toward Risk: An Economic Analysis*, 86 *Harvard Law Review* 693 (1973); R. Posner, *Optimal Sentences for White-Collar Criminals*, 17 *American Criminal Law Review* 409 (1980).

<sup>65</sup>Significant technical objections to this assertion are based attitudes toward risk. See M. Block & R. Lind, *An Economic Analysis of Crimes Punishable by Imprisonment*, 4 *Journal of Legal Studies* 479 (1975); M. Block & R. Lind, *Crime and Punishment Reconsidered*, 4 *Journal of Legal Studies* 241 (1975); J. Coffee, *Corporate Crime and Punishment: A Non-Chicago View of the Economics of Criminal Sanctions*, 17 *American Criminal Law Review* 419, 423–26 (1980).

business enterprises and wealth constraints for individuals prevent monetary sanctions alone from achieving the desired level of deterrence.<sup>66</sup>

The assumption that monetary sanctions on business enterprises are costless is close to the truth when they are small in relation to the assets of those businesses. But fines at such a low level are unlikely to achieve the desired level of deterrence for cartel activity, which is apt to be highly profitable yet is not easily detected. The calculation above suggests that the necessary fine could be twice the annual turnover within the relevant market of the defendant business enterprises.

Collecting a fine of that magnitude generally would be far from costless because most businesses would not have sufficient liquid assets to cover the fine.<sup>67</sup> For a business with operations concentrated in the relevant market, even total liquidation commonly would not raise sufficient funds to pay a fine twice its annual turnover. The net worth of U.S. corporations is just slightly more than their annual turnover.<sup>68</sup> Consequently, trying to collect a fine twice a business's annual turnover in the relevant market could create major disruptions, and possibly force liquidation, even for business enterprises with substantial diversification outside the market of the cartel activity.

Fines cease being nearly costless as soon as payment requires business enterprises to take disruptive actions, such as selling off assets, and liquidation is particularly costly. Moreover, the costs of fines are not borne entirely by culpable executives and shareholders who reaped the gains from the cartel activity, but

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<sup>66</sup>See R. Posner, *An Economic Theory of Criminal Law*, 85 *Columbia Law Review* 1193, 1201–08 (1985); S. Shavell, *Criminal Law and the Optimal Use of Nonmonetary Sanctions as a Deterrent*, 85 *Columbia Law Review* 1232 (1985).

<sup>67</sup>A study focusing on U.S. criminal antitrust cases during 1955–93 found that only 18 percent of the enterprise defendants had sufficient cash and short-term investments to pay an “optimal fine” calculated much as the figure in the previous section. C. Craycraft, J. Craycraft & J. Gallo, *Antitrust Sanctions and a Firm's Ability to Pay*, 12 *Review of Industrial Organization* 171 (1997). The percentage would have been lower had the study not omitted all defendants for which financial data were not readily available.

<sup>68</sup>The total turnover for all U.S. corporations filing tax returns for the 2005 was \$21.8 trillion, while their net worth was \$23.5 trillion and their cash was \$2.8 trillion. These data are from the Statistics of Income annually released by the U.S. Internal Revenue Service and made available through its website at <http://www.irs.gov/taxstats/>.

also by innocent employees, suppliers, distributors, and communities.<sup>69</sup> Further, the goals of competition policy actually can be frustrated by attempting to collect massive fines because the result could be to eliminate or weaken competitors in markets already less competitive than desired. Consequently, the stated policies of both the European Commission and the United States are to account for ability to pay in imposing fines for cartel activity.<sup>70</sup>

Because fining business enterprises could not deter cartel activity by large business enterprises, or could do so only at a high cost, economic analysis concludes that non-monetary sanctions on individuals are appropriate.<sup>71</sup> In addition, “[e]xperience supports the conclusion that businessmen view prison as uniquely unpleasant and therefore incarceration is a uniquely effective deterrent.”<sup>72</sup> In 2006, the Assistant Attorney General in charge of the Antitrust Division observed: “Our investigators have found that nothing in our enforcement arsenal has as great an effect as the threat of substantial incarceration in a United States prison—nothing is a greater deterrent . . . .”<sup>73</sup>

Imposing large fines on small business enterprises might not be as costly to

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<sup>69</sup>See J. Coffee, Jr., “No Soul to Damn: No Body to Kick”: An Unscandalized Inquiry into the Problem of Corporate Punishment, 79 *Michigan Law Review* 386, 389–93, 401–02 (1981); R. Kraakman, Corporate Liability Strategies and the Costs of Legal Controls, 93 *Yale Law Journal* 857, 882–83 (1984); Wils, *supra* note 30, at 197.

<sup>70</sup>See Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No. 1/2003, O.J. C 210/2, para. 35 (1 Sept. 2006) (allowing fines to be reduced on the basis of “inability to pay” if the fine otherwise “would irretrievably jeopardize the economic viability of the undertaking concerned”); United States Sentencing Commission, Federal Sentencing Guidelines Manual § 8C3.3 (2007) (allowing fines to be reduced on the basis of ability to pay but “not be more than necessary to avoid substantially jeopardizing the continued viability of the organization.”)

<sup>71</sup>Long before the first published economic analysis of crime, President Woodrow Wilson, who had taught economics at Princeton University, argued in a statement to Congress on competition law that “penalties and punishments should fall not upon business itself, to its confusion and interruption, but upon the individuals who use the instrumentalities of business to do things which public policy and sound business practice condemn.” 51 *Congressional Record* 1963 (1914).

<sup>72</sup>Baker & Reeves, *supra* note 31, at 621–22 (citing experience from cartel cases in the United States). See A. Linman, The Paper Label Sentences: A Critique, 86 *Yale Law Journal* 630, 630–31 (1977) (“To the businessman . . . prison is the inferno, and conventional risk-reward analysis breaks down when the risk is jail.”).

<sup>73</sup>T. Barnett, Seven Steps to Better Cartel Enforcement, speech at the 11th annual Competition Law & Policy Workshop, European Union Institute (2 June 2006), available at <http://www.usdoj.gov/atr/public/speeches/216453.pdf>.

society as imposing large fines on large business enterprises, but it would be fruitless. Small business enterprises typically would be unable to pay fines in excess of annual turnover. Forcing them into liquidation is apt to yield little because the profits, including ill-gotten gains from the cartel activity, have been paid out the owners who are also the executives. Deterring cartel activity by small business enterprises clearly requires the use of prison sentences for the executives, who typically would be owners.<sup>74</sup>

### ENTERPRISE ORGANIZATION AND INDIVIDUAL SANCTIONS

Economic analyses of crime and deterrence generally have treated large business enterprises as black boxes, ignoring issues relating to internal organization. Large business enterprises, however, are characterized by a separation of ownership and control that gives rise to internal organizational issues and a potential divergence between the interests of the enterprise or its shareholders and the interests of its executives. This divergence is central to two rationales for custodial sanctions on individuals.

The first rationale, cited by prosecutors,<sup>75</sup> is that imprisoning the executives of business enterprises prevents them from engaging in cartel activity that would be a profit-maximizing strategy for the enterprise.<sup>76</sup> Merely fining the executives would have no effect because (at least in the United States) the enterprises could

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<sup>74</sup>An empirical analysis of criminal cases brought by the Antitrust Division found that criminal antitrust violations tend to be “perpetrated by individuals who gain personally from committing them” because they “have ownership interests” in their firms, which “are likely to be small and have limited assets.” J. Joyce, *The Effect of Firm Organizational Structure on Price-Fixing Deterrence*, Contemporary Policy Issues, October 1989, at 19, 34. Since this study, however, the focus of criminal antitrust enforcement in the United States has shifted to major international cartels.

<sup>75</sup>See S. Hammond, *Charting New Waters in International Cartel Prosecutions*, speech at the 20th annual National Institute on White Collar Crime (2 March 2006) (“We have first-hand accounts from cartel members of how the presence or absence of individual sanctions has directly resulted in actual deterrence and continued competition in the U.S. market and failed deterrence, collusion, and great financial harm in foreign markets.”), available at <http://www.usdoj.gov/atr/public/speeches/214861.htm>.

<sup>76</sup>See, e.g., OECD, *supra* note 42, at 26 (“Individual sanctions can strengthen the incentive of directors and employees to resist corporate pressure to engage in unlawful activity, and thus enhance the level of deterrence.”); R. Blair, *A Suggestion for Improved Antitrust Enforcement*, 30 Antitrust Bulletin 433, 436–38 (1985).



pay the fines imposed on their executives.<sup>77</sup> In this rationale, imposing prison sentences on individuals enhances deterrence by making it impossible for business enterprises to create a system of incentives that can cause their executives to engage in profitable criminal activity. This rationale presupposes that fines on business enterprises are insufficient to make criminal activity unprofitable, which certainly appears to be true with the level of fines imposed today.<sup>78</sup>

The second rationale, cited by economists,<sup>79</sup> is that executives facing no personal sanctions may find it in their interest to engage in criminal activity that is unprofitable to the business enterprises that employ them.<sup>80</sup> This can occur as a result of defects in the design of compensation schemes, especially if the executives have short time horizons or are more willing than business enterprises to take risks.<sup>81</sup> Consequently, business enterprises can incur substantial costs in monitoring their executives and complying with the law.<sup>82</sup> In this rationale, imposing criminal sanctions on individuals enhances deterrence and reduces

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<sup>77</sup>See, e.g., P. Bucy, *Indemnification of Corporate Executives Who Have Been Convicted of Crimes: An Assessment and Proposal*, 24 *Indiana Law Review* 279 (1991).

<sup>78</sup>See OECD, *supra* note 42, at 26 (“It is widely believed that corporate sanctions in the form of fines are almost never sufficiently high to be an optimal deterrent, and that the threat of individual sanctions can be an important complement to corporate, financial sanctions.”); Bolotova & Connor, *supra* note 63.

<sup>79</sup>See P. Buccirossi & G. Spagnolo, *Corporate Governance and Collusive Behavior*, in 2 *ABA Section of Antitrust Law, Issues in Competition Law and Policy* 1219 (W.D. Collins ed., 2008); A.M. Polinsky & S. Shavell, *Should Employees Be Subject to Fines and Imprisonment Given the Existence of Corporate Liability*, 13 *International Journal of Law and Economics* 239 (1993). President Woodrow Wilson, who had taught economics at Princeton University, argued in a statement to Congress on competition law: “Every act of business is done at the command or upon the initiative of some ascertainable person or group of persons. These should be held individually responsible and the punishment should fall upon them, not upon the business organization of which they make illegal use.” 51 *Congressional Record* 1963 (1914).

<sup>80</sup>See Coffee, *supra* note 69, at 393–400. See also C. Alexander & M. Cohen, *Why Do Corporations Become Criminals? Ownership, Hidden Actions, and Crime as an Agency Cost*, 5 *Journal of Corporate Finance* 1 (1999) (empirical evidence interpreted as supporting this explanation for corporate crime).

<sup>81</sup>Enormous salaries for executives in large business enterprises helps deter criminal activity by making the termination of employment as a consequence of such activity into a more significant sanction. See S. Shavell, *The Optimal Level of Corporate Liability Given the Limited Ability of Corporations to Penalize their Employees*, 17 *International Journal of Law and Economics* 203 (1977).

<sup>82</sup>See B. Kobayashi, *Antitrust, Agency, and Amnesty: An Economic Analysis of the Criminal Enforcement of the Antitrust Laws*, 69 *George Washington Law Review* 715, 735–39 (2001).

compliance costs by helping business enterprises create the proper incentives for their executives. This rationale applies even if sanctions on business enterprises are sufficient to make criminal activity unprofitable.

A final rationale for imposing sanctions on individuals goes back to English common law which held that business enterprises were legally incapable of committing a crime because they could not have the guilty state of mind necessary for criminality.<sup>83</sup> In the United States, this notion was long ago rejected as a matter of law.<sup>84</sup> Some modern scholars, however, find appeal in the old English rule, reasoning that monetary sanctions can be imposed as civil fines or tort damages, so the only good reason to criminalize business conduct is to impose the sanction of imprisonment on culpable executives.<sup>85</sup>

### **DETECTING CARTELS REQUIRES SERIOUS SANCTIONS**

Detecting cartel activity is a difficult problem for competition agencies because participants have a strong interest in concealment, especially if they are risking significant sanctions. Moreover, criminalizing cartel activity entails not only adding more serious sanctions, but also adopting the procedural safeguards used by the criminal justice system to protect the innocent. Consequently, proving the crime of cartel activity can be especially challenging.

A tool that has proved valuable in prosecuting criminal activity is inducing one conspirator to turn on the others, which works if cooperating offers the prospect of escaping serious sanctions. In this regard, law enforcement against cartel activity is much like that against many other crimes. The Assistant Attorney General in charge of the Antitrust Division observed a few years ago that investigators had found that nothing creates a “greater incentive” than the prospect of incarceration in inducing an individual who participated in cartel activity “to cooperate in the investigation of his co-conspirators.”<sup>86</sup> Serious

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<sup>83</sup>See 1 W. Blackstone, *Commentaries on the Laws of England* 476 (1771) (“A corporation cannot commit treason or felony, or other crime, in it’s corporate capacity: though it’s members may, in their distinct individual capacities.”).

<sup>84</sup>See *New York Central and Hudson River Railroad Co. v. United States*, 212 U.S. 481, 492–94 (1909); H. Edgerton, *Corporate Criminal Responsibility*, 36 *Yale Law Journal* 827 (1927).

<sup>85</sup>See D. Fischel & A. Sykes, *Corporate Crime*, 25 *Journal of Legal Studies* 319 (1996).

<sup>86</sup>Barnett, *supra* note 73. See also Baker, *supra* note 34, at 709 (individuals not subject to sanctions “have little incentive to work hard to recall awkward facts about meetings and understandings”). In

sanctions for individuals can be critical in building the evidentiary record necessary to establish guilt in a criminal case.

A major development in cartel enforcement over the past quarter century was the advent of leniency programs under which a business participating in cartel activity is granted leniency or amnesty in return for coming forward and cooperating in the investigation and prosecution of its cartel activity. Since 1993 the United States has automatically granted amnesty from prosecution to a business enterprise that meets certain conditions, including that it is the first to come forward and cooperates completely in the investigation.<sup>87</sup> The prospect of amnesty from criminal prosecution for just the first participant in cartel activity to come forward can have a major destabilizing effect on cartel activity.<sup>88</sup>

A grant of amnesty to a business enterprise carries over to its executives, provided they also cooperate completely with the investigation. The destabilizing effect is enhanced if executives face serious individual sanctions.<sup>89</sup> Individual sanctions on executives can be used to induce them to cooperate even when their employers elect not to do so.<sup>90</sup> Thus, in 1994 the U.S. program was extended to individuals.<sup>91</sup> The widespread use of prison sentences for cartel

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the United States, substantial assistance to authorities in investigating or prosecuting another person is an explicit basis for a downward departure from the guideline sentence. See United States Sentencing Commission, Federal Sentencing Guidelines Manual § 5K1.1 (2007).

<sup>87</sup>Antitrust Division, U.S. Department of Justice, Corporate Leniency Policy (10 August 1993), available at <http://www.usdoj.gov/aatr/public/guidelines/0091.pfd>.

<sup>88</sup>The effects of these programs are detailed in nontechnical terms by G. Spagnolo, Leniency and Whistleblowers in Antitrust, in P. Buccirossi, ed., *Handbook of Antitrust Economics* 259 (2008); C. Leslie, Antitrust Amnesty, Game Theory, and Cartel Stability, 31 *Journal of Corporation Law* 453 (2006). A technical treatment is provided by J. Harrington, Optimal Corporate Leniency Programs, 56 *Journal of Industrial Economics* 215 (2008).

<sup>89</sup>See P. Massey, Criminalization and Leniency: Will the Combination Favourably Affect Cartel Stability?, in K. Cseres, M.P. Schinkel & F. Vogelaar, eds., *Criminalization of Competition Law Enforcement* 176, 189 (2006) ("Unless the risk of imprisonment is perceived to be real, criminal sanctions are unlikely to enhance the effectiveness of leniency programmes."); S. Hammond, Cornerstones of an Effective Leniency Program, speech at the ICN Workshop on Leniency Programs (November 2004), available at <http://www.usdoj.gov/aatr/public/speeches/206611.pdf> ("Individuals stand the most to lose and so avoiding jail sentences is the greatest incentive for seeking amnesty.").

<sup>90</sup>See OECD, *supra* note 42, at 26 ("sanctions against individuals also can increase the effectiveness of leniency programmes as they are a powerful incentive for individuals to reveal information about existing cartels and to cooperate in investigations")

<sup>91</sup>Antitrust Division, U.S. Department of Justice, Individual Leniency Policy (10 August 1994),

activity gives the leniency program in the United States a powerful destabilizing effect than most other programs lack.

### **DETERMINATION OF SANCTIONS IN PARTICULAR CASES**

Appropriate sanctions for cartel activity in any particular case depend on variety of factors, the most important of which is the severity of the offense. Participants should face greater sanctions the broader the scope of their cartel activity and the longer it has gone on.<sup>92</sup> Since the purpose of the sanction is to deter the offense, the ideal measure of offense severity arguably is the gain to the defendants from the unlawful cartel activity.<sup>93</sup> Also arguably relevant, and closely related to the defendants' gain, is harm to the victims. But basing sanctions on gain or harm would require costly efforts to estimate such effects. Such efforts, however, should be avoided because they would seriously undermine the efficiency of the legal system.<sup>94</sup> Moreover, basing sanctions on estimates of gain or harm would provide an opportunity for those engaging in cartel activity to escape serious sanctions simply as a consequence of difficulties in the estimation. The deterrent effect of sanctions could be greatly undermined as a result.

The base sentence for both business enterprises and individuals convicted of cartel activity should be keyed to a proxy for offense severity that can be used in a criminal justice system with minimal difficulty. The best choice appears to be the turnover of each defendant for the products covered by the cartel activity over the period it occurred. This "affected turnover" is used in the United States for calculating base sentences.<sup>95</sup> The U.S. Sentencing Guidelines also specifically

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available at <http://www.usdoj.gov/atr/public/guidelines/0092.pfd>.

<sup>92</sup>Making sanctions proportionate to severity is essential to maintain a deterrent effect at the margin. See G. Stigler, *The Optimum Enforcement of Laws*, 78 *Journal of Political Economy* 526, 527–28 (1970).

<sup>93</sup>See Whelan, *supra* note 36, at 12.

<sup>94</sup>See generally W. Schwartz & G. Tullock, *The Costs of a Legal System*, 4 *Journal of Legal Studies* 75 (1975).

<sup>95</sup>See United States Sentencing Commission, *Federal Sentencing Guidelines Manual* part R (2007). The Guidelines provide that the base fine for a business enterprise is 20 percent of its affected turnover. The minimum fine is then calculated by multiplying the base fine by a number between 0.75 and 2, which is derived from a "culpability score." *Id.* §§ 2R1.1(d), 8C2.5, 8C2.6. The maximum fine is twice the minimum fine. Base prison sentences for individuals are based on specified ranges of

account for additional factors affecting the appropriate sentence, and judges may depart from the Guidelines in the interests of justice.<sup>96</sup>

## CONCLUSION

The premise of competition law is “that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress.”<sup>97</sup> Cartel activity is the antithesis of “unrestrained interaction of competitive forces,” so banning cartel activity is a cornerstone of competition law. But merely banning cartel activity is only symbolic if the ban is not backed up with serious sanctions. Deterring cartel activity, which is likely to be highly profitable, requires both substantial fines on the business enterprises found to have engaged in cartel activity and prison sentences for the culpable executives. Let the punishment fit the crime.

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affected turnover. *Id.* § 2R1.1(b), ch. 5.

<sup>96</sup>The freedom of judges to depart from the Sentencing Guidelines is a recent development resulting from decisions of the Supreme Court, especially *United States v. Booker*, 543 U.S. 220 (2005).

<sup>97</sup>*Northern Pacific Railway Co. v. United States*, 356 U.S. 1, 4 (1958).